



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**4631M**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0115157</b>	GFL0106667	GFL0097726
Sample Date		Client Info		<b>14 Apr 2024</b>	05 Feb 2024	24 Nov 2023
Machine Age	hrs	Client Info		<b>21152</b>	20553	19914
Oil Age	hrs	Client Info		<b>599</b>	639	583
Filter Age	hrs	Client Info		<b>599</b>	639	583
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	23	48
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	10	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

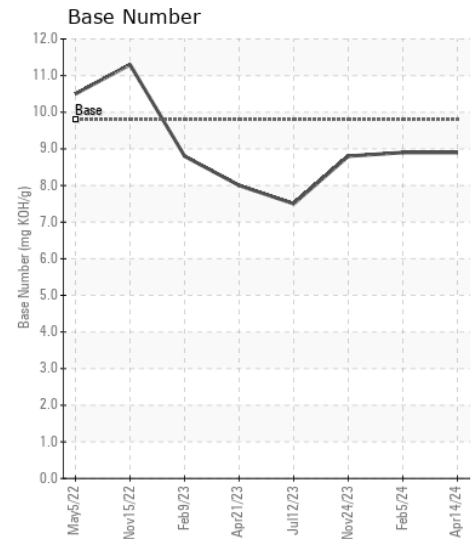
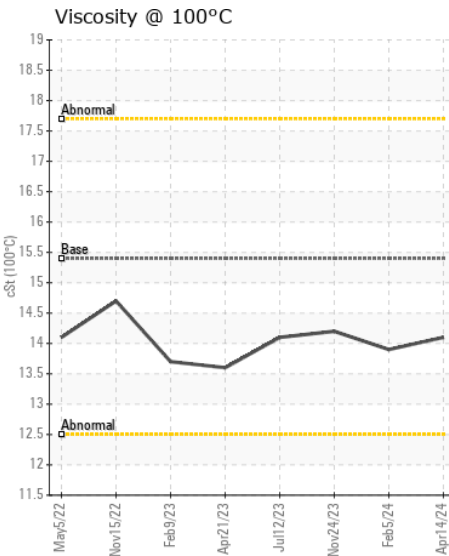
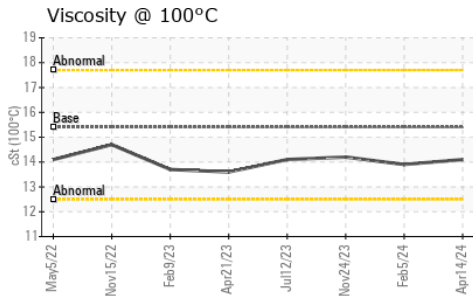
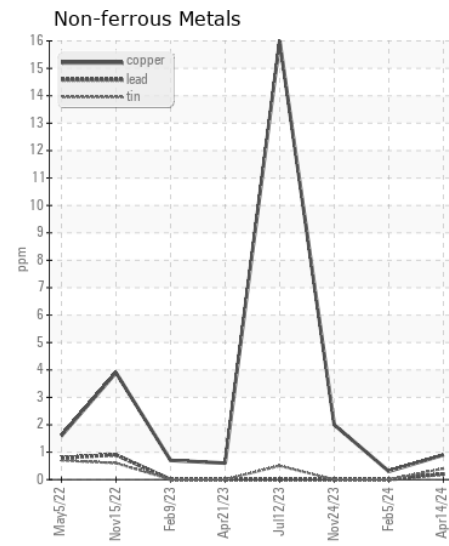
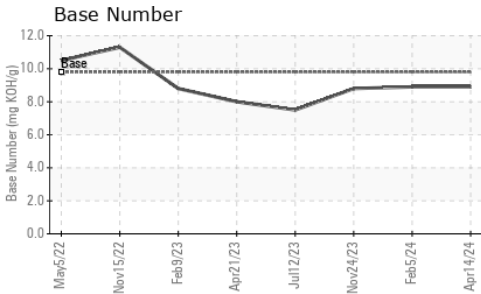
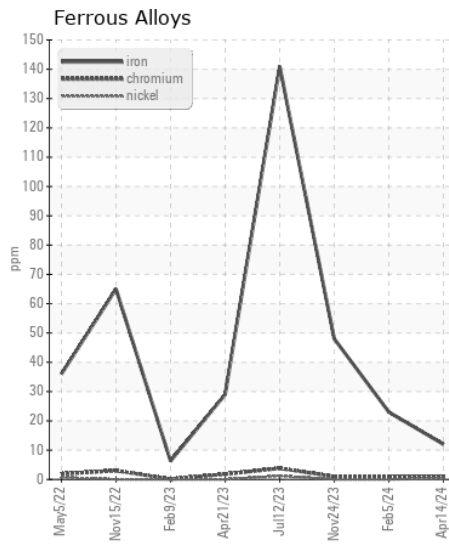
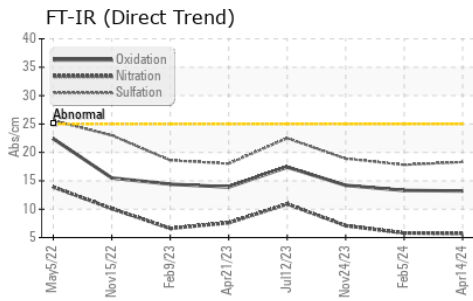
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.7</b>	5.8	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.3</b>	17.8	18.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	6	17
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	5	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>56</b>	60	63
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>920</b>	988	1099
Calcium	ppm	ASTM D5185m	1070	<b>1037</b>	1113	1245
Phosphorus	ppm	ASTM D5185m	1150	<b>1063</b>	1136	1224
Zinc	ppm	ASTM D5185m	1270	<b>1239</b>	1337	1581
Sulfur	ppm	ASTM D5185m	2060	<b>3370</b>	3371	3762
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	13.3	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.9</b>	8.9	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	13.9	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115157  
**Lab Number** : 06153979  
**Unique Number** : 10989402  
**Test Package** : FLEET

**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 22 Apr 2024 - Wes Davis

**GFL Environmental - 405 - Arbor Hills**  
 7811 Chubb Rd  
 NORTHVILLE, MI  
 US 48168  
 Contact: John Nahal  
 jnahal@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: